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Nos. 14-840 and 14-841

IN THE

Supreme Court of the United States

FEDERAL ENERGY REGULATORY COMMISSION,
Petitioner,

v.

ELECTRIC POWER SUPPLY ASSOCIATION, *et al.*,
Respondents.

ENERNOC, INC., *et al.*,
Petitioners,

v.

ELECTRIC POWER SUPPLY ASSOCIATION, *et al.*,
Respondents.

On Writ of Certiorari to the United States Court of Appeals for the District of Columbia Circuit

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BRIEF OF SOUTHERN COMPANY SERVICES, INC. AS *AMICUS CURIAE* SUPPORTING RESPONDENTS

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INTERESTS OF *AMICUS CURIAE*[1]

Southern Company Services, Inc. ("SCS") is the centralized system service company providing specialized services to The Southern Company and its subsidiary companies, including Alabama Power Company, Georgia Power Company, Gulf Power Company and Mississippi Power Company (collectively, the "Retail Operating Companies"). As a result, SCS acts as agent for the Retail Operating Companies in proceedings before state and federal agencies and courts. The Retail Operating Companies serve over 4.5 million retail customers in the service territory comprised of the States of Alabama, Georgia, the northwestern portion of Florida and southeastern Mississippi and have a total system generating capacity of 45,000 MW (collectively, the Retail Operating Companies and SCS are referred to herein as "Southern Companies").

This case is significant to Southern Companies because demand response has been an important part of their system operations for over twenty (20) years. Their ability to tailor demand response programs to the unique needs of each State has allowed Southern Companies to develop a portfolio of products and programs that currently have the potential to reduce peak demand during times of system constraint by over 3,000 MW. Southern Companies' demand response programs also have allowed them to avoid the construction of over 2,000 MW of new generating

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[1] All parties have consented to the filing of this brief and copies of their consent letters have been filed with the Clerk. Pursuant to Rule 37.6, counsel certifies that this brief was not authored in whole or in part by counsel for any party, and that no person other than *amicus* or its counsel made a monetary contribution to its preparation or submission.

capacity and have resulted in significant operational efficiencies and cost savings to their customers.

While Southern Companies are not in a region subject to Order No. 745, arguments made in this proceeding that the integration of demand response into wholesale markets pursuant to this FERC rule is superior to that provided under state regulation are not supported by the evidence. Moreover, if Order No. 745 is allowed to stand, it would provide the precedent for the erosion of the authority reserved to the States by the Federal Power Act,[2] which in turn could disrupt the effective demand response programs (and other state-regulated programs) that Southern Companies rely upon to render safe, economic, and reliable electric services to their retail customers.[3]

INTRODUCTION AND SUMMARY OF ARGUMENT

On hot summer afternoons and cold, polar vortex mornings, electric utilities across the Southeast rely upon demand response to substantially reduce demand for electricity to ensure the safe and reliable operation of the electric system. In such regions, where

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[2] 16 U.S.C. § 824, *et seq.*

[3] *See Elec. Power Supply Ass'n v. FERC*, 753 F.3d 216, 222 (D.C. Cir. 2014), *cert. granted*, 83 U.S.L.W. 3835 (U.S. May 4, 2015) (No. 14-840) & *consolidated sub nom. EnerNOC, Inc. v. Elec. Power Supply Ass'n*, 83 U.S.L.W. 3835 (U.S. May 4, 2015) (No. 14-841) ("*EPSA*") ("[I]f FERC's arguments are followed to their logical conclusions ... retail demand response ... would also affect jurisdictional rates in the same way as the type of demand response at issue in FERC's rule here, and FERC's authority regarding demand response would be almost limitless.... [N]othing would stop FERC from expanding this regulation and encroaching further on state authority in the future.").

FERC has not exercised the authority it asserts in Order No. 745, demand response has been and continues to be effectively integrated into grid operations under the exclusive rate authority of the States. These States have established demand response programs that support the reliable operation of the electric system while saving customers money.

Claims that the demand response programs in those States are inherently inferior to that provided under FERC's regulation of wholesale markets pursuant to Order No. 745 are not supported by the facts. Data provided by the U.S. Electric Information Administration ("EIA") for 2013 for large utilities shows that while the national average for the potential reduction of peak demand afforded by demand response was 2.6%, Southern Companies' potential peak demand reduction was 6.2%. Likewise, FERC's 2014 *Assessment of Demand Response & Advanced Metering* shows that the region of the country having the highest amount of potential peak reduction provided by demand response was the SERC Reliability Corporation ("SERC") – a region where demand response compensation was almost exclusively regulated by the States when that assessment was prepared. In addition, the most recent summer and long-term reliability assessments prepared by the North American Electric Reliability Corporation ("NERC") show that the integration of demand responses in regions where it is not regulated by FERC compares favorably to regions that are subject to Order No. 745.

In Southern Companies' experience, state-specific approaches to integrating demand response programs have not resulted in the "balkanization" of demand response but, instead, have allowed more tailored approaches so as to attract greater participation by

customers. Indeed, state-specific approaches are not a "balkanization" but the federalism adopted in the Federal Power Act's reservation of certain authorities to the States. Concerns that a state-regulatory approach forecloses the regional integration of demand response also are not borne-out by Southern Companies' experience over their collective, multi-state footprint. Among other things, demand response is incorporated into the joint electric pool operated by Southern Companies.

Arguments that FERC regulation of demand response compensation at wholesale is necessary to address failures in state-regulated retail rate designs are undermined by the fact that state-regulated demand response programs have enjoyed, and continue to enjoy, great success in those markets unencumbered by FERC rules. Criticisms that state-regulated programs do not generally provide for real-time, dynamic pricing is countered not only by the many state-regulated programs that provide those products, but also by the fact that Order No. 745 itself does not constitute a full dynamic pricing program. This is because Order No. 745's incentive payments are not available all hours but only when the payments pass the "net benefits" test. Furthermore, Order No. 745 incentive rate payments constitute only one aspect of the price signal that the end-use customer has to consider when deciding whether or not to consume during a particular period. Specifically, in addition to the FERC incentive payment that the end-use customer would receive, an informed customer also would need to consider the retail charges that would otherwise apply.

Lastly, while FERC and its supporters correctly identify the reliability, policy and environmental

benefits provided by demand response, those same types of benefits are afforded through state-regulated demand response programs. This same result should come as no surprise since both FERC's and the States' programs are regulating the same activity – the decision by a retail customer whether to forego electric consumption during a particular period.

ARGUMENT

I. Demand Response is Being Effectively Integrated into Markets without FERC Intervention.

FERC indicates, and *amici* in support of FERC argue, that FERC regulation of demand response rates through direct payments to retail ratepayers from wholesale market operators is a superior approach than relying upon state-regulated demand response programs.[4] Moreover, they argue that demand response is inherently part of the "wholesale market" because demand response "lower[s] wholesale rates"[5] and, in any case, the States are incapable of effectively regulating it.[6]

As an initial matter, arguments that demand response is inherently part of the wholesale market

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[4] *See* FERC Br. at 28-29, 31, 43; Electricity Consumers and DR Providers Br. at 8-18; Guarini Br. at 10-13; Private Petitioners Br. at 8-9, 39-40.

[5] FERC Br. at 33; *see also* Private Petitioners Br. at 38-40 (arguing that FERC regulation of demand response is necessary to ensure just and reasonable rates).

[6] *See, e.g.*, Guarini Br. at 11 n.5 ("Moreover, even if dynamic pricing were [sic] widely adopted, wholesale demand response programs may still confer distinct reliability benefits to wholesale market operators.").

fail to take into account that demand response under both FERC's Order No. 745 and state-administered programs regulate the same activity – the decision by a retail customer whether to forego the consumption of electricity during a particular period. FERC's definition of "demand response" makes clear that the demand response that Order No. 745 regulates involves the *consumption* of electricity, which inherently is a retail activity:

> *Demand response* means a reduction in the *consumption* of electric energy by customers from their expected *consumption* in response to an increase in the price of electric energy or to incentive payments designed to induce lower *consumption* of electric energy.[7]

Moreover, arguments by FERC and its supporters that Order No. 745 is inherently a superior approach to the integration of demand response to that provided

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[7] 18 C.F.R. § 35.28(b)(4) (relevant emphases added). In fact, before the D.C. Circuit, FERC acknowledged that "'*wholesale* demand response' is a fiction of its own construction." *EPSA*, 753 F.2d at 221 (emphasis in original) (quoting Oral Arg. Tape, No. 22-1486, at 27:31 (D.C. Cir. Sept. 23, 2013). Likewise, the briefs of the other petitioners and *amici* supporting FERC on numerous occasions reference how "wholesale" demand response is simply a decision and action by an end-use customer. *See, e.g.*, Private Petitioners Br. at 44 ("Companies like petitioners that aggregate and manage demand response resources build complex network operation centers that allow demand response to be bid into wholesale energy markets and ensure that ***end-user customers curtail demand*** when called upon to do so....") (emphasis added); *see also, e.g.*, California Br. at 1 ("Both federal statutes and statutes of many States ... supporting allowing ***retail customers*** to participate in wholesale energy markets....") (emphasis added); *id.* at 11 ("cooperation between State and FERC allow ***retail bidding of demand response*** in wholesale markets....").

under state regulation are incorrect as they ignore the robust integration of such "reduction in the consumption of electricity" that has occurred in regions not subject to FERC Order No. 745. For example, in Southern Companies' expansive service territory – covering more than 120,000 square miles in significant portions of four Southeastern states (Alabama, Georgia, Florida, and Mississippi) with over four million retail customers[8] – demand response has been and continues to be reliably, economically, and effectively integrated into markets and grid operations.

Data compiled by the EIA, through its Form EIA-861 surveys, demonstrates that FERC regulation of demand response compensation rates is not necessary for the expansion and successful integration of demand response into grid planning and operations.[9] In concert with their state regulators, Southern Companies have developed a robust set of demand response programs that significantly exceed the national average for the potential reduction of retail consumption that is achievable by those programs during peak conditions. In 2013, the national average for the potential reduction of peak demand afforded by demand response programs for large utilities was 2.6%.[10] By comparison, Southern Companies'

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[8] http://www.southerncompany.com/about-us/our-business/home.cshtml.

[9] The Form EIA-861 data is available at: http://www.eia.gov/electricity/data/eia861/.

[10] *See* http://www.southerncompany.com/what-doing/corporate-responsibility/energy-innovation/championing-energy-efficiency.cshtml. Nearly two-thirds of the nation's electric load is served by utilities subject to Order No. 745. *See* FERC Br. at 6.

potential reduction during summer peak usage was 6.2% – more than double the national average.[11]

2013 EIA-861 Potential Peak Reductions from Demand Response (Large Utilities – 2,000 MW and above)

	Summer Peak (MW)	Potential Peak Savings from Demand Response (MW)	Percentage Savings
Southern Companies	30,824	1,918	6.2%
US Average	7,887	202	2.6%

FERC's own demand response reports also show the successful integration of demand response in regions not subject to Order No. 745. The most recent of these reports is FERC's 2014 *Assessment of Demand Response & Advanced Metering*.[12] FERC's analysis

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[11] *See* http://www.southerncompany.com/what-doing/corporate-responsibility/energy-innovation/championing-energy-efficiency.cshtml. As shown in the following table, this 6.2% amount of potential peak savings for Southern Companies is based upon EIA data that shows 1,918 MW of potential peak savings having been available for Southern Companies in 2013. While significant, Southern Companies' internal data shows an even higher amount, 2,974 MW of potential peak savings, was actually available to Southern Companies in 2013. Utilizing that internal data brings Southern Companies' actual potential peak savings from demand response in 2013 to 9.64%.

[12] The report is available at: https://www.ferc.gov/legal/staff-reports/2014/demand-response.pdf ("2014 FERC DR Report"). This report is organized by providing assessments of the different

shows that SERC – the region for the Southeast encompassing, *inter alia*, Southern Companies' service territories and where demand response programs were almost exclusively regulated by the States when the data for that report was compiled – had the highest amount of potential peak reduction of all of the NERC regions.[13] In addition, the Florida Reliability Coordinating Council ("FRCC") – an area in which demand response is also regulated by the State – is identified as one of only three regions where more than half of the meters are smart meters, a key new technology that facilitates the deployment of certain demand response programs by communicating real-time meter readings to system operators.[14]

The most recent reliability assessments performed by NERC[15] further reinforce that State authority over demand response is highly effective. The following table draws data from the 2015 Summer Assessment to identify some regions where FERC regulates demand response and some regions where it does not, showing: 1) the amount of demand response identified as available in that region for the summer of 2015;

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regions that report to NERC. NERC is the Electric Reliability Organization ("ERO") for purposes of Federal Power Act Section 215. *See* 16 U.S.C. § 824o(a)(2).

[13] *See* 2014 FERC DR Report at 9-10 (Tables 3-1 and 3-2).

[14] *Id.* at 4 (Table 2-2); *see also* Joint States Br. at 37-38 (discussing the role smart meters play in facilitating end-use customers' provision of demand response).

[15] *See 2015 Summer Reliability Assessment* ("2015 Summer Assessment"), available at: http://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/2015_Summer_Reliability_Assessment.pdf. The assessments provide, among other things, data regarding the total amount of demand response available in each region.

2) the total demand identified within that region for electricity for the summer of 2015; and 3) a ratio of the percentage of that total demand response relative to that total internal demand:

	Total Demand Response Available (MW)	**Total Internal Demand (MW)**	**Ratio of Demand Response to Load**
FERC-Regulated Region			
MISO[16]	5,031	127,319	3.95%
PJM[17]	7,780	155,544	5%
SPP[18]	1,284	50,529	2.54%
State-Regulated Region			
FRCC[19]	3,101	46,452	6.68%
SERC[20]	4,718	131,395	3.6%

As shown above, regions where FERC does not regulate demand response compensation compare favorably to regions where FERC does.

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[16] *See* 2015 Summer Assessment at 21.

[17] *Id.* at 36.

[18] *Id.* at 39.

[19] *Id.* at 19.

[20] *Id.* at 37. These numbers for SERC are the summation of the NERC data provided for all three of the SERC sub-regions.

Similar data is provided by NERC's most recently issued long-term reliability assessment.[21] The 2014 LTRA provides projections for all years from 2015-2024. The following compares the demand response and load data similar to that provided in the table above but for the last year of the LTRA's projections – 2024:

	2024 Total Demand Response Available (MW)	2024 Total Internal Demand (MW)	Ratio of Demand Response to Load
FERC-Regulated Region			
MISO[22]	4,851	138,433	3.5%
PJM[23]	12,402	173,729	7.1%
SPP[24]	1,327	56,991	2.3%
State-Regulated Region			
FRCC[25]	3,523	52,981	6.65%
SERC[26]	7,363	149,584	4.9%

[21] NERC's *2014 Long-Term Reliability Assessment* ("2014 LTRA") available at: http://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/2014LTRA_ERATTA.pdf.

[22] *Id.* at 38.

[23] *Id.* at 72.

[24] *Id.* at 82.

[25] *Id.* at 36.

[26] *Id.* at 78-79. These numbers for SERC are the summation of the NERC data provided for all three of the SERC sub-regions.

The foregoing data dispels the notion that demand response can only be effectively integrated into grid operations through FERC regulation of the compensation. Regions where demand response programs remain solely subject to regulatory oversight by the States are doing an effective job integrating demand response into their markets. In short, arguments and indications that the integration of demand response in wholesale markets through FERC regulation is inherently superior to that in regions not subject to Order No. 745 are not accurate.

II. Demand Response Programs Work Well Under the Federal Power Act's Reservation of Authority Over Retail Rates to the States – FERC Need Not Overrule Congress's Design.

A. A State-Specific Approach Has Not Resulted in the "Balkanization" of Demand Response

The Joint State Petitioners argue that if FERC is not allowed to regulate demand response compensation, then there would be "the possibility for a balkanized market to develop, where [S]tates are required to patch together individual rules for participation of demand response resources at the retail level...."[27] The end result, they claim, is "[t]he likelihood [] that huge portions of demand response will simply disappear...."[28]

Again, this theoretical claim is undermined by actual experience. Southern Companies operate a

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[27] Joint States Br. at 31; *see also* Private Petitioners at 39-40.

[28] Joint States Br. at 32.

joint electric pool (dispatching generation and operating the Southern Companies' transmission network as a single system) that operates in four different States subject to regulation by four separate state regulatory commissions. The differences in the demand response programs in those separate retail jurisdictions have not been a hindrance to the incorporation of demand response in Southern Companies' footprint. To the contrary, Southern Companies have developed demand response programs in their different jurisdictions that meet the unique customer characteristics and requirements of each State's regulatory framework. These more tailored approaches (as compared to the one-size-fits-all approach adopted in Order No. 745) generally encourage greater participation of demand response by end-users.

For example, Alabama is characterized by a significant concentration of large industrial customers that has allowed Alabama Power Company (under the regulatory oversight of the Alabama Public Service Commission) to develop an interruptible load program that pays customers for the ability to interrupt loads for system needs (*e.g.*, to address system peak or reliability needs). This program benefits the participants of the program through direct payments and all ratepayers, generally, by avoiding the construction of generation capacity that would ultimately be recovered through retail rates.

In Georgia, where there is a lower concentration of industrial load, Georgia Power Company (under the regulatory oversight of the Georgia Public Service Commission) has developed a "Voltage Reduction" program that allows end-use customers to lower the voltage on certain electric equipment (*i.e.*, electric

feeders) while maintaining reliability operating requirements in times of system needs. This program, therefore, results in lower electric consumption and allows Georgia Power Company to avoid building generation capacity to meet peak demand, thereby putting downward pressure on the rates for all customers. Georgia Power Company also has developed a direct load control program under which residential customers receive credits to their retail bills in return for allowing Georgia Power Company to attach a device to those customers' air conditioning systems that allows Georgia Power Company to reduce the air conditioning units' running time during periods of peak demand.[29]

Furthermore, Southern Companies have flexibility in designing these retail demand response programs to further attract end-user participation. For example, in the real-time pricing programs offered by Georgia Power Company and discussed further below,[30] the following, simple alternatives are provided: day-ahead and hour-ahead pricing options. This ability to offer different, easy to understand demand response pricing options allows customers to select the best option for them based on their own ability to manage or respond to dynamic price signals. A top-down, one-size-fits-all approach does not allow for this customization, thereby limiting the ability of customers to participate in demand response programs.

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[29] *See* http://www.georgiapower.com/residential/products-and-programs/power-credit/.

[30] *See infra* at 16.

The costs and benefits of each of the above-described programs are reviewed and approved by the governing state regulatory authority. The end result of this variety of programs has not been a diminished participation of demand response in Southern Companies' markets. To the contrary (as discussed above), they have allowed Southern Companies to achieve robust demand response participation, achieving a potential peak savings from demand response of 6.2% that is significantly higher than the national average for large utilities of 2.6%.[31]

B. Retail Customers have Real-Time Pricing Options without FERC Involvement

Those supporting FERC argue that FERC action over the compensation for demand response in wholesale markets is necessary because of apparent regulatory failures by the States in their regulation of retail markets. As framed by the Private Petitioners, the basis for this criticism is that "[u]nlike wholesale prices, retail prices, *i.e.*, electricity prices charged to consumers, are not generally permitted to fluctuate hour-by-hour or even day-by-day...."[32]

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[31] *See supra* at 7-8; *see also id.* at n. 11 (explaining that using Southern Companies' internal data increases Southern Companies' percentage to 9.64%).

[32] *See* Private Petitioners Br. at 8-9; *see also* Guarini Br. at 10 ("[T]here are political obstacles to implementing retail dynamic pricing – for example, very high prices during peak demand periods threaten public backlash – and it has not been widely adopted by state regulators."); *see also Conn. Power & Light Co. v. FPC*, 324 U.S. 515, 530 (1945) (identifying the infirmity with the argument that FERC should be permitted to usurp state regulatory authority over retail rates when states are "unable" to accomplish FERC's goals: Congress deliberately chose to leave

Again, this argument does not comport with actual experience. As part of Southern Companies' development of demand response programs tailored to meet the unique customer characteristics and regulatory environments of their different jurisdictions, Southern Companies have implemented numerous real-time and price-sensitive retail rates. These programs provide participating customers[33] price signals to inform their decision whether to consume or forego consumption at any particular time. Georgia Power Company was, in fact, one of the first utilities to develop a real-time pricing program, which FERC noted was "probably the most successful voluntary real-time pricing program in the United States."[34]

Alabama Power Company offers more than 20 retail rates and rate riders that incorporate demand response.[35] First, there are rates and rate riders that

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such decisions with the more politically responsive state authorities even if "some degree of efficiency of [the] federal plan [was] thereby sacrificed.").

[33] Southern Companies' different State jurisdictions have not mandated the universal usage of real-time pricing. Instead, Southern Companies have adopted numerous real-time and price sensitive programs in an effort to maximize the voluntary subscription to these demand response programs by their end-use customers.

[34] FERC *Assessment of Demand Response and Advanced Metering*, August 2006, Revised 2008 at 61; *see also id.* at 60-63, available at: http://www.ferc.gov/legal/staff-reports/demand-response.pdf.

[35] These and other Alabama Power Company retail rates are available at: http://www.alabamapower.com/business/pricing-rates/home.asp; *see also* http://www.alabamapower.com/business/pricing-rates/rate-riders-adjustments.asp. As demonstrated by a review of those rates, demand response is a core component to numerous retail rate programs and resulting retail sales.

provide time-of-use pricing – lower rates during periods of lower electricity demand to encourage consumption during non-peak times. These programs also impose higher rates during the peaks to encourage lower consumption when demand is high. Second, there are real-time pricing programs where the customer pays rates based upon Alabama Power Company's incremental cost of providing electric service.

In Florida, Gulf Power Company has developed its innovative Energy Select program.[36] This nationally recognized energy conservation program provides residential customers free programmable thermostats that allow their central cooling and heating system, electric water heater, and pool pump to automatically respond to different electricity prices that change depending upon the time of day, day of week, and season. This is a very effective demand response program that provides price signals to residential customers to discourage consumption during periods of peak electric demand.[37]

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[36] *See* http://www.gulfpower.com/residential/earthcents/energy-select/program-overview/what-is-it.cshtml.

[37] As demonstrated by the descriptions of Southern Companies' demand response programs provided in this brief, those state-regulated programs offer consumers both types of demand response discussed in FERC's definition of demand response provided in its regulations. Specifically, Southern Companies' real-time and time-of-use programs provide participating retail customers incentives to reduce their consumption "in response to an increase in the price of electric energy...." *Compare* 18 C.F.R. § 35.28(b)(4). In addition, Southern Companies' interruptible programs provide participating retail customers "incentive payments" to allow for the interruption of the provision of service to them when deemed appropriate by Southern Companies in their role as system operator. *Compare id.*

In addition, while Private Petitioners and the Guarini Center criticize State retail rate programs for not being more in the nature of real-time pricing, it bears noting that the FERC-regulated demand response program is not a full, real-time pricing program. First, Order No. 745's incentive payments are not always available. As explained in FERC's brief, making the FERC demand response program available all hours would actually result in an increase in the cost of energy during some hours – particularly periods having low demand – due to the "billing unit effect."[38] The billing unit effect refers to how "a decrease in demand 'may result in an increased cost per unit ... associated with the decreased amount of load paying the bill.'"[39] Given this complication, unlike a full dynamic pricing program where the rate that the end-use customer bears fluctuates essentially all hours to track the utility's incremental costs, the availability of the FERC incentive demand response payments is limited to times that those payments pass FERC's "net benefits test." Second, while a retail dynamic pricing program generally results in the end-use customer being provided a single price signal (based upon the utility's incremental costs) upon which the customer makes the determination whether or not to consume electricity for a particular period of time, Order No. 745's demand response incentive payments are only a part of the price signal that the consumer receives. This is because the customer should also consider the cost of the retail charges that

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[38] FERC Br. at 50 (quoting Pet. App. 55a).

[39] *Id.*

they would bear should they decide to consume and not take the FERC incentive payments.[40]

C. Southern Companies' Demand Response Programs are Integrated over Southern Companies' Multi-State Footprint

Amicus Guarini argues that a state-by-state demand response approach will result in "[b]alkanizing the market for demand response resources along state lines" because "[a] State will not consider the benefits that other States enjoy from its demand reductions, because the State will receive no compensation for reducing electricity prices in other States and will have to bear the full costs of the demand reductions that it undertakes."[41] This concern is, again, not borne-out by Southern Companies' experience. Not only do Southern Companies perform integrated resource planning that coordinates long-term planning for both supply-side (*e.g.*, electric generators) and demand-side (*e.g.*, demand response) options to identify appropriate means to address system needs over their multi-state footprint, but the operation of Southern Companies' joint electric pool also integrates demand response over that collective footprint.

In particular, Southern Companies' joint electric pool is governed by their "Intercompany Interchange

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[40] *Id.* From Southern Companies' twenty-plus-years' experience in offering real-time pricing programs, Southern Companies have found that customers can only make informed decisions when they clearly understand the price they are paying. Mechanisms that have after the fact true-ups, or a need to switch between multiple options, tend to drive customers to options that are simpler and more certain or to simply not participate in the complicated program.

[41] Guarini Br. at 12.

Contract" ("IIC").[42] Among other things, the IIC provides for "reserve sharing" among the Southern Companies that recognizes that each of them may have a temporary surplus or deficit of capacity in any given month.[43] In determining whether each of the Southern Companies has a surplus or deficit of capacity, the IIC explicitly recognizes the "Active Demand Side Options" that each should be allowed to recognize as reducing their total peak demand requirements.[44] In addition to incorporating demand response into their reserve sharing calculations, the IIC also provides for hourly energy transfers ("Interchange Energy") between the Southern Companies based upon the variable costs of the generating resources that are considered to have supplied that energy.[45] During any given hour, the actual utilization of the above-described demand response programs offered by Southern Companies that reduces electric consumption inherently results in downward pressure on such charges for hourly Interchange Energy. Thus, it is entirely possible for demand response to be effectively incorporated into multi-state grid operations without FERC setting the rates for demand response compensation.

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[42] The currently effective IIC is available at: http://www.southerncompany.com/about-us/our-business/energy-auction/pdfs/Intercompany%20Interchange%20Contract%20_5-18-07.pdf.

[43] *See id.* at Section 7.1.

[44] *Id.* at attached Allocation Methodology and Periodic Rate Computation Manual, Section 4.2.8.

[45] *Id.* at Section 8.1.

D. A State-by-State Approach is Not "Balkanization" but the Federalism Codified in the Federal Power Act

Characterizing state regulation of demand response as a "balkanization" is also inappropriate because such regulation is, in fact, the cooperative federalism mandated by Congress in the Federal Power Act. Section 201 of the Federal Power Act reserves specific powers to the States to regulate retail sales, generation, local distribution, etc.[46] Congress, in reserving those powers, obviously intended that the States (which are, by design, more responsive to local issues and needs than a federal agency) continue to develop retail electricity programs that those States consider to be appropriate for their respective citizens. Rejecting complete uniformity, Congress chose to have the States (and not FERC) regulate the relationship between end-users and their electric service provider.[47]

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[46] *See* 16 U.S.C. § 824(b)(1).

[47] "It is one of the happy incidents of the federal system that a single courageous State may, if its citizens choose, serve as a laboratory...." *New State Ice Co. v. Liebmann*, 285 U. S. 262, 311 (1932) (Brandeis, J., dissenting).

III. Demand Response Programs, Whether Regulated By FERC *or the States*, Provide Environmental, Reliability, and Policy Benefits

FERC and virtually all other petitioners and *amici* supporting FERC emphasize the many benefits of demand response.[48] The Private Petitioners note that "[i]n the 'polar vortex' of the 2014 winter, for example, PJM deployed demand response to maintain system reliability and to meet its highest ever winter peak demand."[49] Southern Companies do not dispute that demand response provides these benefits, but only emphasize that those same types of benefits are provided by state-regulated demand response programs. This should not be a surprise because demand response, in either case, involves the same action by an end-use customer to reduce its consumption of electricity during a particular period.

For example, Southern Companies' demand response programs were likewise critical in maintaining reliability and meeting system needs during the same polar vortex of 2014. Specifically, on January 7, 2014, Southern Companies called for their demand response customers to curtail demand and, as a result, were able to keep system demand during those extreme weather conditions more than 1,400 MW below peak.[50]

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[48] *E.g.*, Brief of Stanford Economics Professor Charles D. Koldstad at 3-6; Guarini Br. at 3-13.

[49] Private Petitioners' Br. at 39.

[50] Private Petitioners argue that a "critical problem" with integrating demand in retail markets is that they "are generally not considered firm resources, because they are not known to grid operators or dispatchable." Private Petitioners Br. at 40 (internal quotations omitted). These assertions are contrary to Southern

Again this reduction was possible and accomplished over a four-state region with a so-called "patchwork"[51] of state-regulated demand response programs.[52]

Likewise, *amicus* Guarini cites specific "resource efficiency" and "environmental benefits" from wholesale demand response.[53] Southern Companies' demand response programs established under state regulation afford the same type of benefits: Southern Companies' demand response programs similarly reduce average prices by limiting peaks in demand for electricity;[54] Southern Companies' demand response programs limit price spikes by helping flatten demand for power;[55] Southern Companies' demand response programs provide an alternative resource to electricity generators to keep the grid in balance;[56] Southern

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Companies' experience. As demonstrated by the following examples already discussed in this brief, Southern Companies have numerous demand response programs that are considered "firm resources" as well as those that are "dispatchable": during the polar vortex, Southern Companies were able to rely upon their demand response programs to curtail consumption; Alabama Power Company's above-discussed interruptible programs allow the utility to dispatch demand response consistent with the terms of those programs (*see supra* at 13); and Southern Companies' reserve sharing calculations include firm, "demand-side options" (*see supra* at 20).

[51] *See, e.g.*, Joint States Br. at 32; Electricity Consumers and Demand Response Providers Br. at 10.

[52] *See supra* at 13-20 (describing Southern Companies' effective integration of demand response programs regulated by four separate state regulatory authorities).

[53] Guarini Br. at 5-9.

[54] *Compare id.* at 5.

[55] *Compare id.* at 6.

[56] *Compare id.* at 6-7.

Companies' demand response programs provide environmental benefits by avoiding the running of more expensive, older power plants and thereby reducing emissions;[57] and as shown above by the polar vortex example, Southern Companies' demand response programs fortify reliability.[58]

In short, in Southern Companies' experience, demand response regulated by state public service commissions works well (and in accordance with Congress's design). Expanding FERC jurisdiction over demand response compensation would endanger these state-regulated programs by allowing FERC to second-guess and potentially displace those retail programs. And because virtually all state-regulated electricity programs affect wholesale electric service, FERC's assertion of jurisdiction here, if allowed to stand, would provide precedent for FERC to adjust other State retail programs using the hook that retail service "directly affects" wholesale rates. If FERC's jurisdictional assertion and arguments are accepted, the Federal Power Act's reservations of authorities to the States will be significantly eroded and diminished.

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[57] *Compare id.* at 8-9.

[58] *Compare id.* at 7-8. Importantly, the benefits shown by the Grid Engineers in their brief of how demand response is used in West Texas to integrate wind generation are effectuated in a region not subject to Order No. 745. Rather, the State of Texas exclusively regulates such programs. *See* Grid Engineers and Experts Br. at 21-22.

CONCLUSION

For these reasons, and those stated by respondents, Southern Companies urge the Court to affirm the decision below.

Respectfully submitted,

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